

We claim:

1. A method for manufacturing an organic electroluminescence panel including:

a transparent substrate having a first electrode layer and an insulating layer formed on said first electrode layer, said first electrode layer being comprised of pieces formed to correspond to a plurality of pixels and to be driven by active devices respectively, said insulating layer having rectangular apertures corresponding to said pixels respectively, said pieces of said first electrode layer being exposed from said rectangular apertures respectively;

a hole transfer layer and a hole injection layer formed correspondingly to said plurality of pixels so as to be laminated sequentially on said pieces of said first electrode layer through said rectangular apertures;

an organic emitting layer comprised of pieces formed on said hole injection layer correspondingly to said pixels respectively;

an electron injection layer and an electron transfer layer formed to be laminated sequentially on said organic emitting layer; and

a second electrode layer formed on said electron transfer layer over said plurality of pixels in common;

said method comprising the step of:

forming at least one of said organic emitting layer, said

electron injection layer and said electron transfer layer out of a deposition material by deposition via mask holes of a multilayer metal mask disposed in close contact with said insulating layer of said transparent substrate;

wherein said multilayer metal mask having a plurality of metal layers of which a metal layer on the side of said transparent substrate and a metal layer on the side of a supply source of said deposition material are different in material, and at least one of said metal layers other than said metal layer on the side of said transparent substrate is made of a thick plate of a magnetic material, while the area of each mask hole of said metal layer on the side of said transparent substrate is equal to or smaller than the area of each mask hole of said metal layer on the side of said supply source of said deposition material.

2. A method for manufacturing an organic electroluminescence panel according to Claim 1, wherein in said multilayer metal mask an inner wall of each mask hole of said metal layer on the side of said supply source of said deposition material has a funnel-like shape having a tilt angle not smaller than 30 degrees and not larger than 85 degrees, and open to said supply source of said deposition material.

3. A method for manufacturing an organic electroluminescence panel according to Claim 1, wherein in said multilayer metal mask said metal layer on the side of said

transparent substrate is thinner than said metal layer on the side of said supply source of said deposition material.

4. A method for manufacturing an organic electroluminescence panel according to Claim 1, wherein in said multilayer metal mask said mask holes of said metal layer on the side of said transparent substrate has longitudinal and crosswise sizes corresponding to said pixels respectively, while each mask hole of said metal layer on the side of said supply source of said deposition material has a longitudinal size including a plurality of said pixels in common.

5. A method for manufacturing an organic electroluminescence panel according to Claim 1, wherein in said multilayer metal mask said mask holes of said metal layer on the side of said transparent substrate has longitudinal and crosswise sizes corresponding to said pixels respectively, while a curvature radius of each corner portion of said mask holes is not larger than 5 micrometers.

6. An organic electroluminescence panel comprising:

a transparent substrate having a first electrode layer and an insulating layer formed on said first electrode layer, said first electrode layer being comprised of pieces formed to correspond to a plurality of pixels and to be driven by active devices respectively, said insulating layer having rectangular apertures corresponding to said pixels respectively, said pieces of said first electrode layer being exposed from said

rectangular apertures respectively;

a hole transfer layer and a hole injection layer formed correspondingly to said plurality of pixels so as to be laminated sequentially on said pieces of said first electrode layer through said rectangular apertures;

an organic emitting layer comprised of pieces formed on said hole injection layer correspondingly to said pixels respectively;

an electron injection layer and an electron transfer layer formed to be laminated sequentially on said organic emitting layer; and

a second electrode layer formed on said electron transfer layer over said plurality of pixels in common;

wherein each short side of said rectangular apertures is not longer than 14 micrometers, while each long side thereof is not longer than 42 micrometers.

7. An organic electroluminescence panel comprising:

a transparent substrate having a first electrode layer and an insulating layer formed on said first electrode layer, said first electrode layer being comprised of pieces formed to correspond to a plurality of pixels and to be driven by active devices respectively, said insulating layer having rectangular apertures corresponding to said pixels respectively, said pieces of said first electrode layer being exposed from said rectangular apertures respectively;

a hole transfer layer and a hole injection layer formed correspondingly to said plurality of pixels so as to be laminated sequentially on said pieces of said first electrode layer through said rectangular apertures;

an organic emitting layer comprised of pieces formed on said hole injection layer correspondingly to said pixels respectively;

an electron injection layer and an electron transfer layer formed to be laminated sequentially on said organic emitting layer; and

a second electrode layer formed on said electron transfer layer over said plurality of pixels in common;

wherein each short side of said rectangular apertures is not longer than 14 micrometers, while each long side thereof is not longer than 42 micrometers;

wherein each piece of said organic emitting layer formed for each pixel on said hole injection layer and each piece of said electron injection layer and electron transfer layer formed and laminated sequentially on said organic emitting layer are larger than each of said rectangular apertures exposing said first electrode layer therefrom, and a curvature radius of each corner portion of said rectangular apertures is not larger than 5 micrometers.

8. An organic electroluminescence panel according to Claim 7, wherein a pitch of said pixels formed in said rectangular

apertures respectively is not longer than 69 micrometers along the long sides of said rectangular apertures and not longer than 23 micrometers along the short sides of said rectangular apertures.